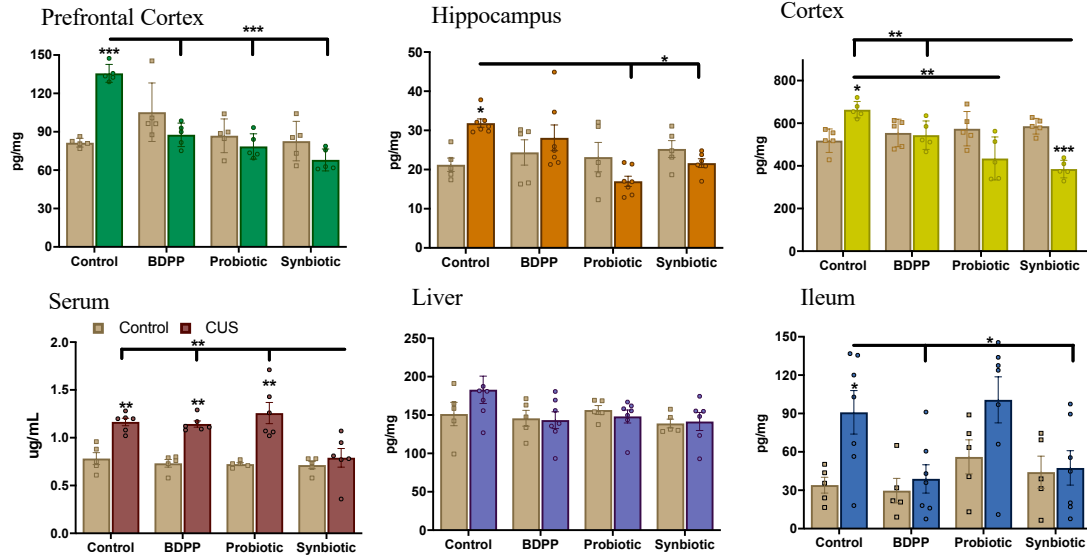


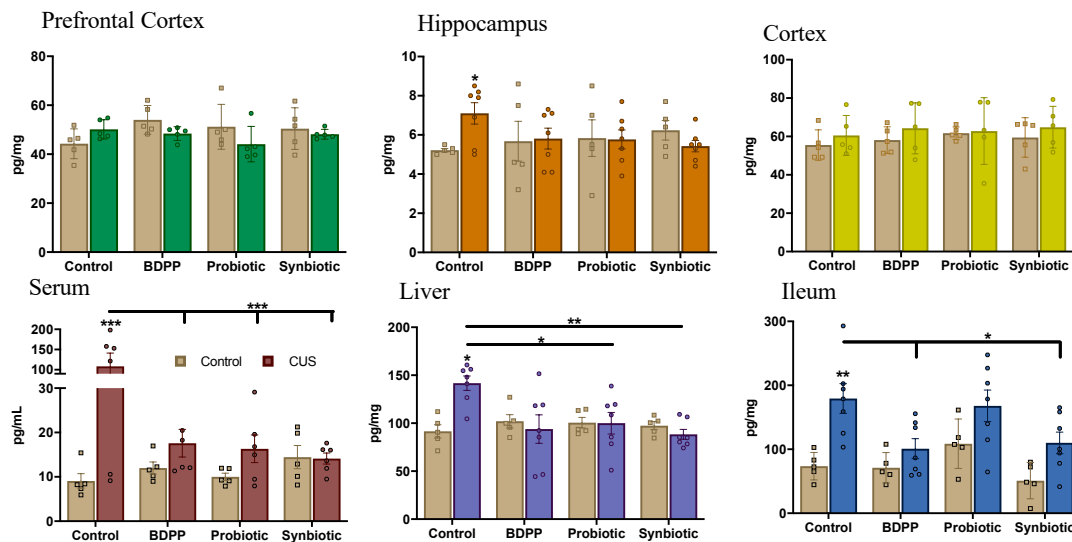
Supplementary Figure 1: Weight, Food and Water Consumption of Mice Undergoing Chronic Stress Protocol

Supplementary Figures

(a) IL-1 β

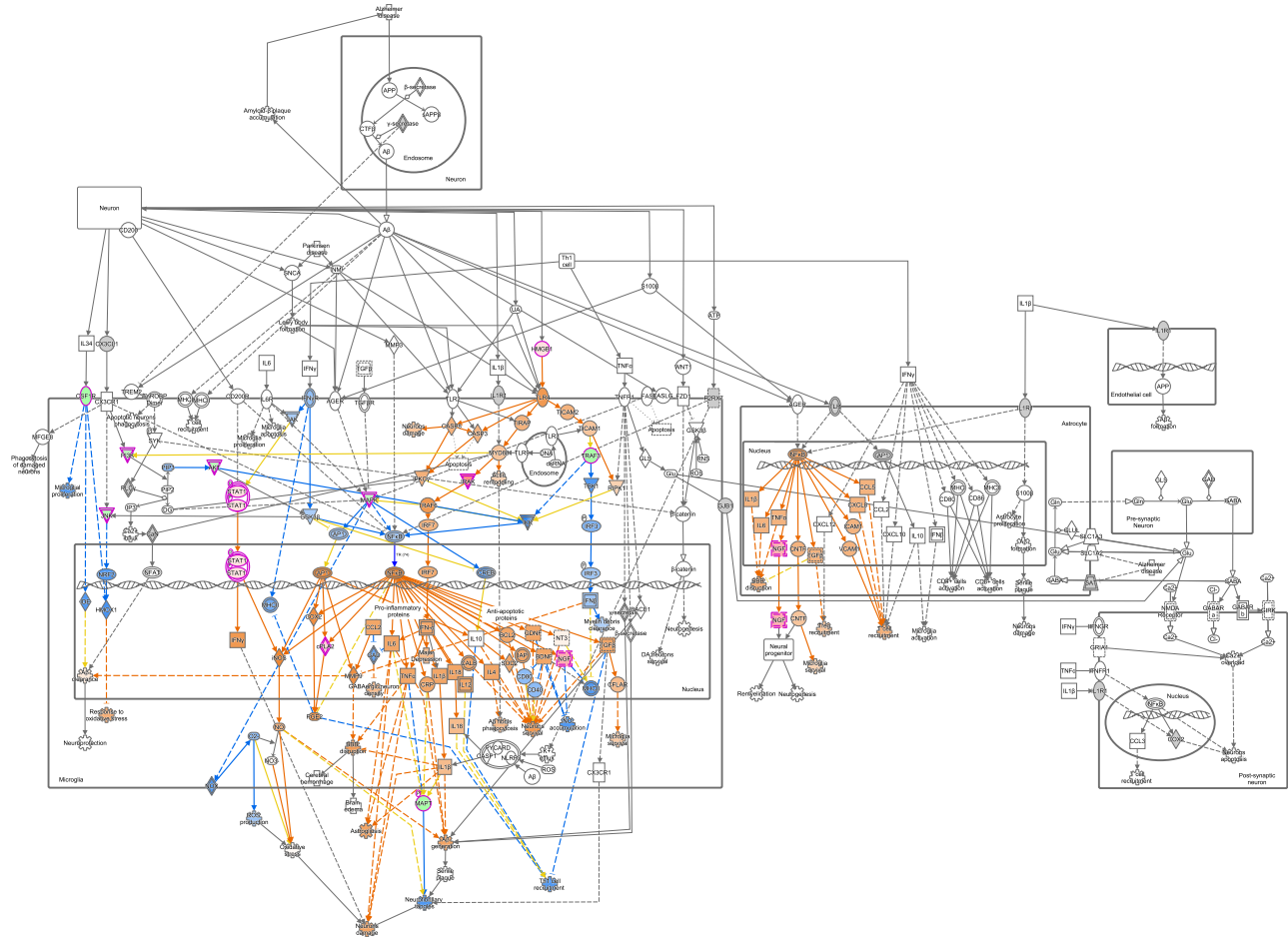


(b) IL-6

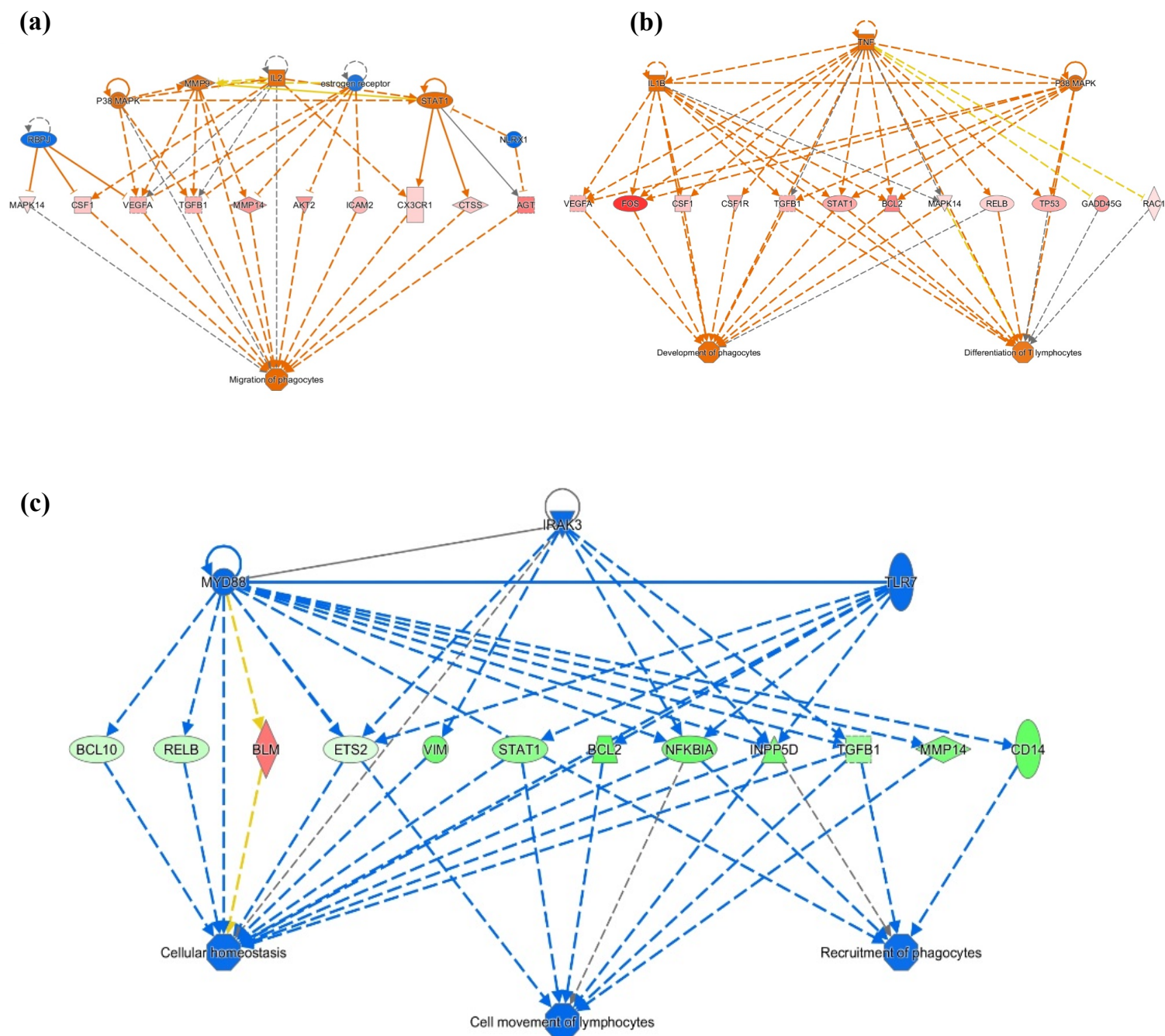


Supplementary Figure 2: A Synbiotic Differentially Impacts Inflammasome-mediated IL-1 β Signaling along the Gut-Brain-Axis. Cytokine expression of (a) IL-1 β and (b) IL-6 was determined by ELISA in the prefrontal cortex, hippocampus, cortex, serum, liver and ileum. Each group represents $n = 6$ independent samples mean \pm SEM with significance determined with a 2-way ANOVA and Tukey's posthoc analysis with * $p < 0.05$ and ** $p < 0.01$.

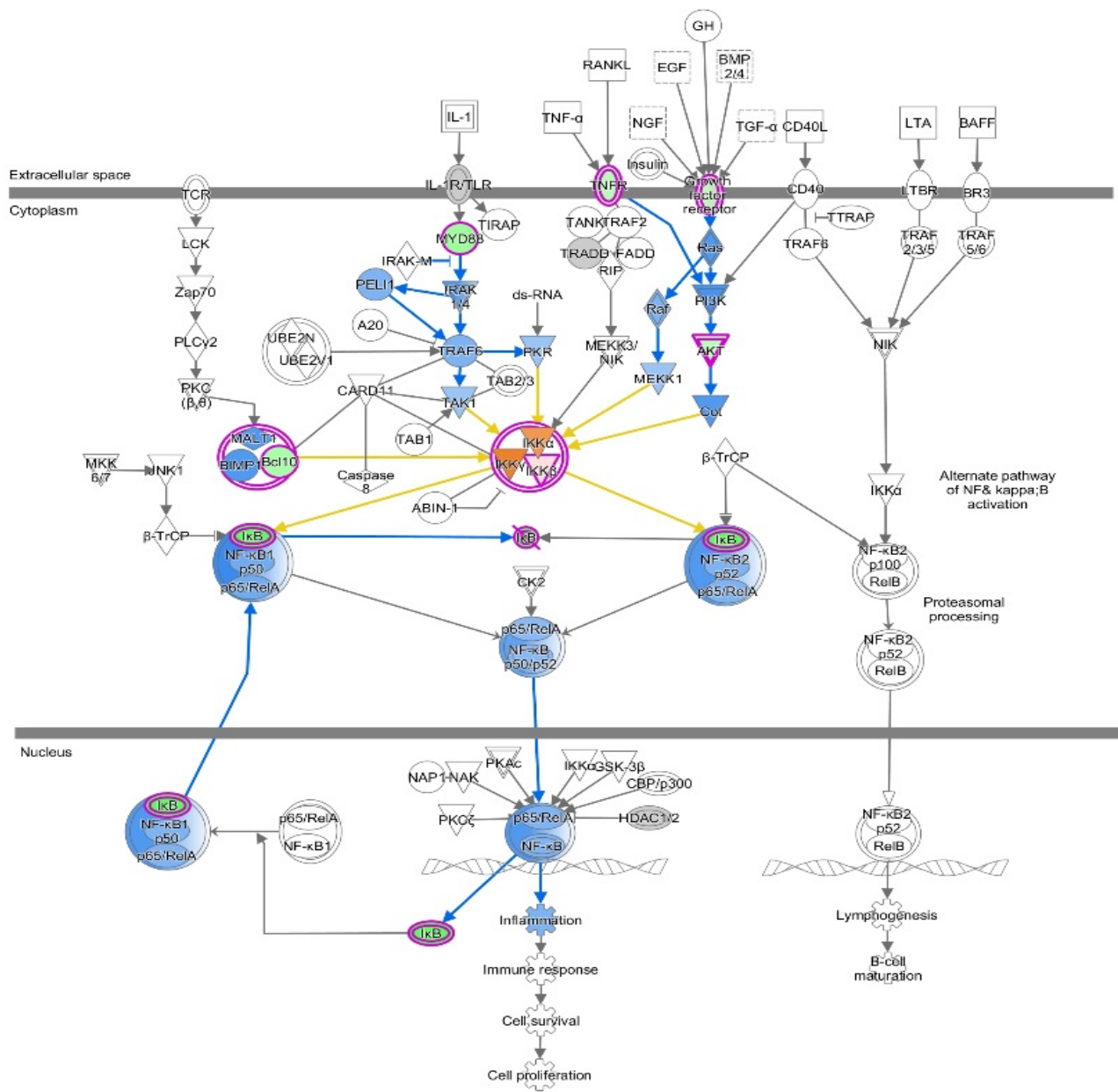
Neuroinflammation involves numerous cell types, acts to clear neuronal damage, and plays a key role in maintaining the homeostasis of CNS. Homeostasis can be lost through various regulatory defects, or when harmful immune components cross the blood brain barrier, causing chronic inflammation with excessive cell and tissue damage, which is associated with neurodegenerative diseases.



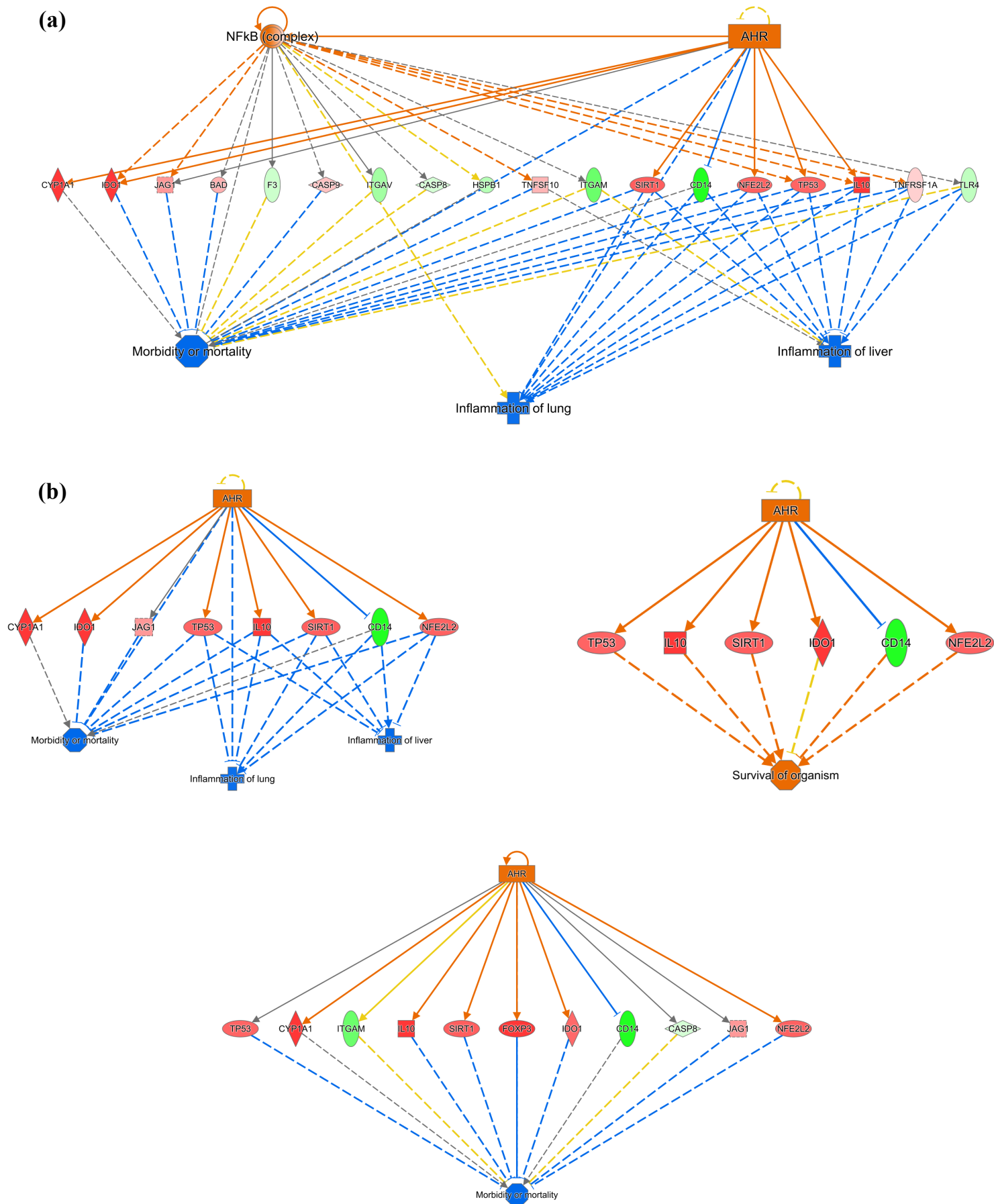
Supplementary Figure 3: Integrated Pathway Analysis of NanoString Differential Expression in Prefrontal Cortex of Stressed Controls



Supplementary Figure 4: Integrated Pathway Analysis of NanoString Differential Expression in Hippocampus Stressed Controls and Synbiotic Treated



Supplementary Figure 5: Integrated Pathway Analysis of NanoString Differential Expression in Liver of Synbiotic-Treated Stressed Mice



Supplementary Figure 6: Integrated Pathway Analysis of NanoString Differential Expression in Ileum of Synbiotic-Treated Stressed Mice